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Public Health Problems and Their
Solution During the Last Fifty Years

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PUBLIC HEALTH PROBLEMS IN MEXICO

AND THEIR SOLUTION DURING

THE LAST FIFTY YEARS

~~WITHDRAWN~~
~~FROM AML~~

CONTRIBUTION OF THE
MEXICAN DEPARTMENT OF PUBLIC HEALTH
TO THE SEMI-CENTENNIAL CELEBRATION OF THE
AMERICAN PUBLIC HEALTH ASSOCIATION



MEXICO.

1921

PUBLIC HEALTH PROBLEMS IN MEXICO
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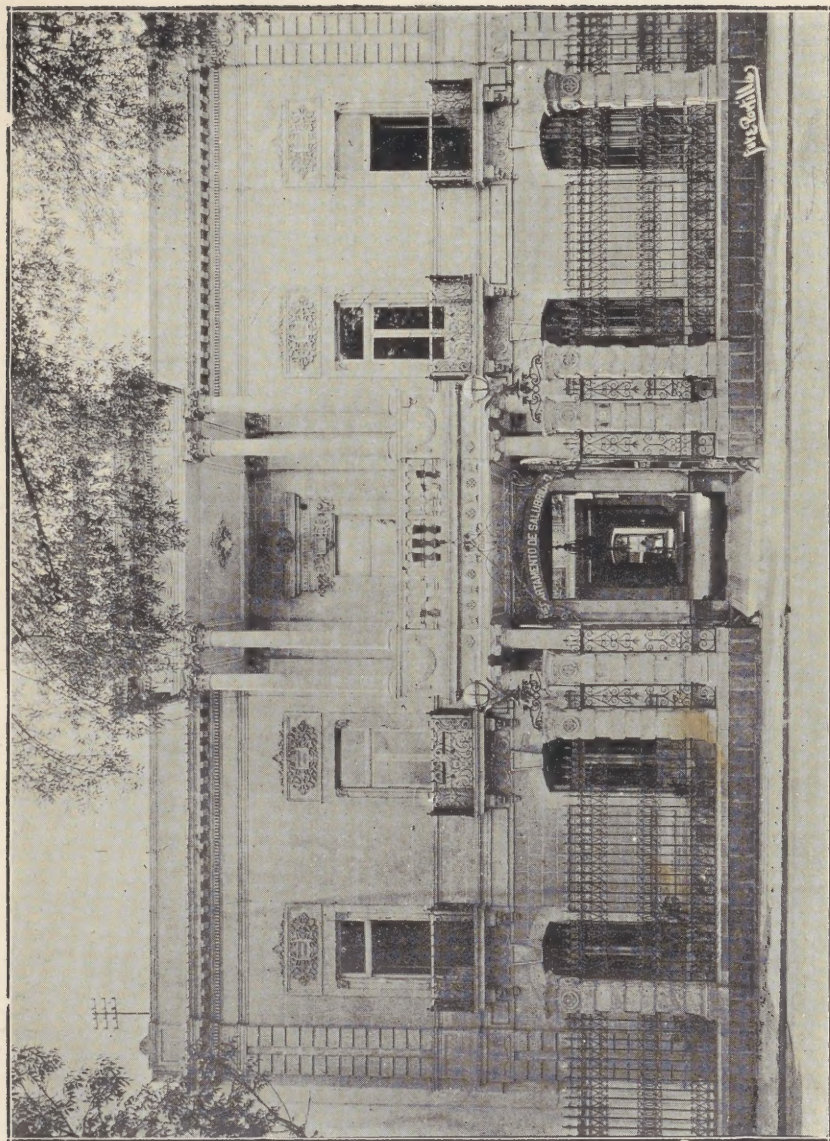
Mexico. Departamento de Salubridad Pública

CONTRIBUTION OF THE
MEXICAN DEPARTMENT OF PUBLIC HEALTH
TO THE SEMI-CENTENNIAL CELEBRATION OF THE
AMERICAN PUBLIC HEALTH ASSOCIATION

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Front view of the principal Building of the *Departamento de Salubridad Pública*,
(Federal Departamento of Public Health).

GENERAL HISTORY.

Until the year 1872 the **Consejo Superior de Salubridad** (1) functioned under the laws put into effect by former Administrations. At that time the **Consejo** was the sole judge and arbiter on questions regarding physicians fees and titles and resolved all problems pertaining to the legal aspect of Medicine. Its duties were so numerous that it was scarcely able to perform them.

In 1872, with the idea of bettering the standing of the **Consejo**, the President of the Republic amended its powers and responsibilities. He took away its authority in matters concerning the right of practicing medicine and revising professional titles, but entrusted with vaccination, and the medical inspection of prostitutes and also increased its authority in matters of public health. Under the new arrangement, the **Consejo** was made up of ten members six of whom were physicians, two pharmacists and two veterinarians. At this time it started a library and established a Chemical laboratory in the School of Mines.

As soon as the **Consejo** was reorganized it passed its first ordinance which established birth registration and notification of death, visits to destitute patients, and the compiling of vital statistics, food inspection and inspection of slaughter houses. It also revised certain laws concerning cemeteries.

In 1877 the **Consejo** was placed under the supervision of a governing committee of **Beneficencia Pública**, but two years later this unwise measure was repealed and the **Con-**

(1) Superior Board of Health.

sejo was considered a Federal Advisory Body, with special budget assigned to it.

The advantages of this new arrangement were immediately evident. The **Consejo** began to form the Medical Climatology of the Valley of Mexico, to initiate beneficial reforms in the hospitals and charitable institutions, and to organize food and rug inspection with the view of punishing falsification and adulteration and started medical inspection of factories.

At the meeting of the First National Congress of Hygiene (1884) a great many things of interest to the Sanitary Organizations of the country were discussed, among others the establishment in the states of health departments similar to the **Consejo**.

In 1885, Dr. Velasco who had accomplished the first permanent organization of the **Consejo** died. Dr. Licéaga took his place and under his direction it continued to progress. In a short time not only was the former service bettered but he also began the sanitation of the cities and ports, established an Institute for the prevention of rabies and began to organize a Bacteriological laboratory.

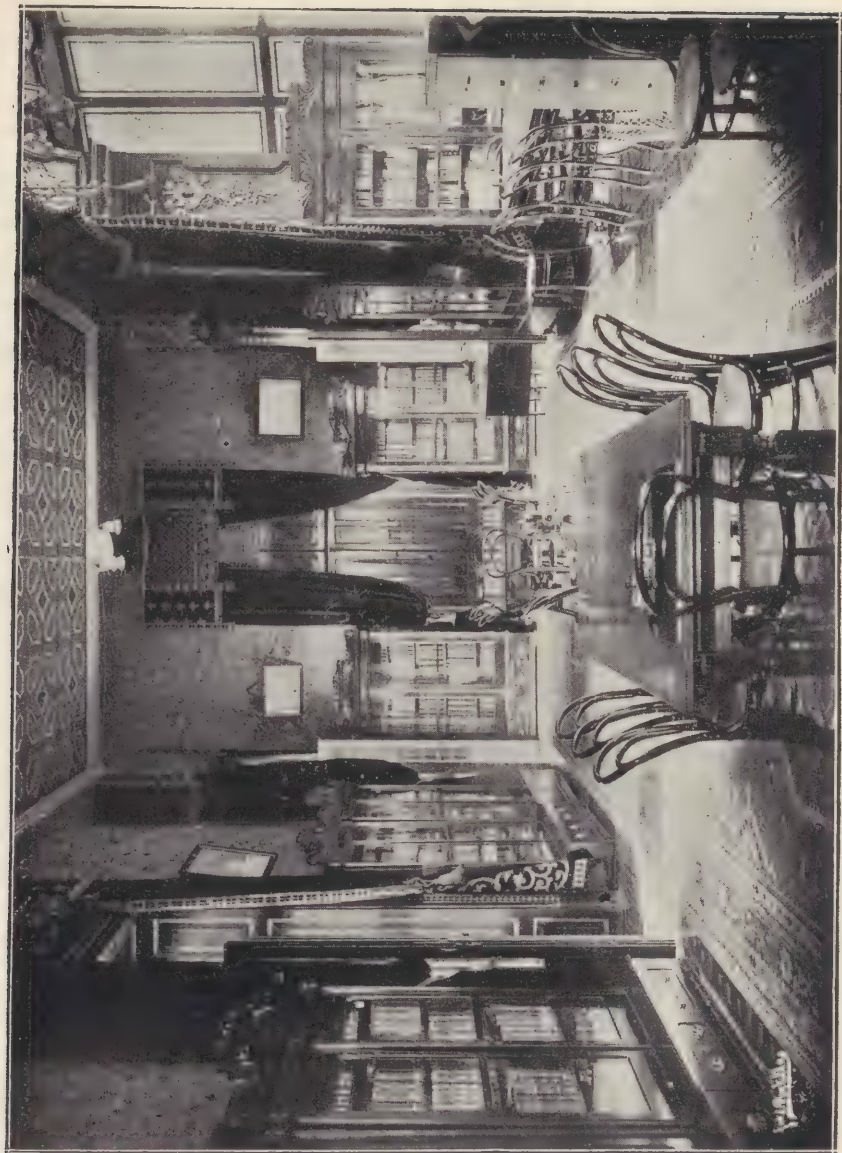
The first Code of Public Health was finished in 1891 and was in effect until 1894..

Several valuable additions to the **Consejo** had been made such as a military physician and a lawyer, and sanitary inspectors were appointed for the Federal District, ports and border towns.

In answer to an invitation extended by the American Public Health Association in its meeting in Brooklyn in 1889, the **Consejo** joined the Association. In 1890, Mexico for the first time sent its delegates to the meeting of the above named Association in Charleston, S. C.

In 1894 the Health Code was again amended to put into effect an ordinance which included International Police Sanitation and Maritime Quarantine.

With the view of establishing uniformity in the direction and organization of the Health Service of the country, Dr. Licéaga strove to elevate the **Consejo** into a Ministry of Pu-



The Library of the Department.

blic Hygiene. He failed in this, although the centralization of the Health Services in the **Distrito Federal**, in the territories and ports of the Gulf and the Pacific became a fact. Dr. Licéaga was President of the **Consejo** until 1914.

In 1917 the **Consejo** became the **Departamento de Salubridad Pública**.

On the 10 th. of may 1920 Dr. Gabriel Malda was appointed Chief of the Department and a little later Dr. Alfonso Pruneda was made General Secretary. Since they have been in office the Department has accomplished works of great importance as may be seen by the following paragraphs.

VITAL STATISTICS.

As already stated the **Consejo Superior de Salubridad** began its work in 1872 by adopting regulations concerning birth and death registrations and by the organization of statistics. However it was not until 1879 that Dr. Agustin Reyes member of the Governing Committee of the **Consejo** presented a plan for the keeping of statistics which was adopted and used for several years.

At that time there was no census of México City. The last one taken in 1790 had shown it to be a city of 112,926 inhabitants. In 1879 Dr. Reyes estimated the population to be approximately 260,000 inhabitants.

In 1888 the **Consejo** proposed the adoption of the Nomenclature used by the London Royal College of Medicine, not only because it was in use in the English speaking countries but also because in that way our statistics might be compared with theirs.

When the "Committee on Nomenclature and Form of Statistics" called together by Drs. Abott, Lindsley, Hewitt, Pelletier and Monjarás met in Montreal in 1894, the adoption of Dr. Bertillon's Nomenclature for diseases and causes of death was proposed with the purpose of making statistics of the different countries uniform so that they might be compared. As a result, in 1895 the President of México

declared the above named Nomenclature adopted. Afterwards, a committee in which there were three Mexicans, Drs. Licéaga, Monjarás, and Ramírez, proposed that the Government of the United States, México and Canada accept it as the standard for the Morbidity Statistics of the census of 1900. They continued their work until in 1901 the South American Countries adopted it also.

Besides this joint action with the United States and Canada, México is proud of the fact that she was the first country to use Dr. Bertillon's Nomenclature. The Health Authorities of San Luis Potosí have modeled and published their statistics according to it since 1892. At the Fifteenth International Congress on Hygiene and Demography, Dr. Bertillon said that it was a satisfaction to him that even before the United States or Canada, thanks to the initiative of Dr. Monjarás, then Secretary of the Departament of Health of San Luis Potosí, México had been the first to adopt his system. (*)

México was represented at the International Comission which met in Paris in 1900 to make the first decennial revision of the Nomenclature. México adopted all the modifications approved by the Comission. The same can be said in regard to the second revision effected in 1910.

The Third International Congress for the revision of the classification of Causes of Death took place in París in October 1920. Delegates from almost all the civilized countries were present and the modification consisted mainly in making subdivisions for certain diseases and giving a definite title and name to each of these subdivisions. The Nomenclature is thus very much better than before.

The delegate from the New York Departament of Health submitted the above Nomenclature to his Department for its approval in February of the present year. Although we had not been invited to the Paris Congress, in April of this year, Dr. Pruneda, General Secretary of the **Departa-**

(*) Transactions of the Fifteenth International Congress on Hygiene and Demography, Vol. VI, page 53.

mento de Salubridad Pública sent the new Nomenclature to the member of the Governing Committee which is in charge of the Section of Demography that he might study it and order its acceptance by the Department not only to keep its own statistics but to recommend it to other offices which deal with them.

So much for the statistic of the causes of death. The statistics pertaining to Morbidity began to be compiled in 1880 under a plan presented by Dr. N. Ramírez de Arellano which was based on certain considerations such as facts pertaining to the profilaxis of communicable diseases. According to his plan it was approved that same year that every two weeks the physicians should report all cases known to them of such diseases.

In the Health Convention in 1905, México in common with other nations promised to send out its statistics of mortality.

THE POPULATION OF THE CITY OF MEXICO.

In 1793 the Viceroy, Conde de Revillagigedo made the first census of the city. México at that time had 112,296 inhabitants. It was not until 1890 that the second census was made and to that time there were 326,594 people. In 1900, according to the census, México was a city of 368,899 inhabitants and in 1910 it had 471,066 population. In a short time a new census will be taken and it is possible that the number of inhabitants will be very nearly a million.

MORTALITY IN THE CITY OF MEXICO.

Principal causes of Death.

Until 1901 the number of deaths in the city has been considered between 42 and 59 per thousand, that is to say an average of 49.4. From 1902 to this time mortality rate has been between 40.6 and 57.3 per thousand, an average of 45.8.

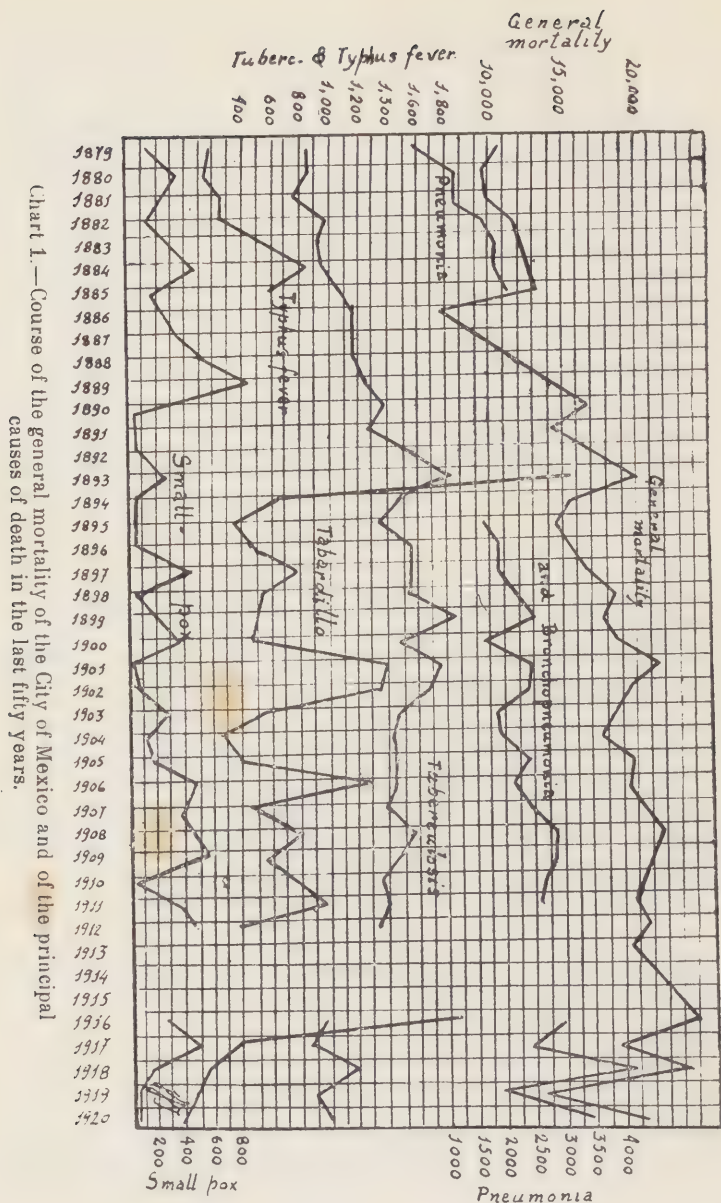


Chart 1.—Course of the general mortality of the City of Mexico and of the principal causes of death in the last fifty years.

In Chart No. 1 the curve of general mortality shows that the death rate in recent years is less than in the years before but it is not possible to estimate its average as no census has been taken since 1910. From that time to now the population has increased in a proportion which is very hard to calculate. It is certain however the mortality in the City of Mexico remains very high if we compare it with other European and American cities of the same population.

Chart No 1 shows the general mortality and at one side the most frequent causes of death. We will refer to them in brief.

a.—Pneumonia and Broncho-Pneumonia.

These diseases are great factors in the mortality of the City of Mexico. In 1850 Orozco y Berra placed pneumonia among those which caused more deaths. The revision of the mortality statistics from 1879 to 1920 shows me that pneumonia caused 23.15 o|o of all deaths during that period. This fatality gives an idea of the frequency of the disease. It may be due to our high geographical situation, 7300 feet above sea level and to the sudden climatic changes to which we are exposed.

b.—Tuberculosis.

Already in 1890 Dr. Licéaga was engaged in preparing a paper to be presented to the International Congress at Berlin in which he told of the prevalence of tuberculosis in México, which was greater than in Paris but less than in the principal cities of Europe and the United States.

Later in 1907 he strove to combat tuberculosis, and the following year at the Sixth International Tuberculosis Congress which was the first to meet in America, he discussed the means of carrying on the campaign, and the advantage of placing the patients in fresh air camps or sanitariums, the later plan meeting with his highest approval. At that

Figura 1.—*Monte de las Cruces* the future site of the Sanitarium for Tuberculosis



time he told of having approach the authorities in México to urge them to hold conferences on the subject. He also proposed the establishment of dispensaries where suspected cases might be examined and if these people showed to be suffering from the disease might be instructed to follow treatment at home under the supervision of special nurses.

In Chart No. 1 we can follow the course which mortality on account of tuberculosis has taken in the last half century. Happily it shows that this disease perhaps on account of better hygienic conditions has decreased as a cause of death, yet at the same time the general mortality curve shows a certain increase due to the increase of population.

A project for building a large sanitarium for the isolation and education of tuberculosis patients has now been approved. It will be constructed en las Cruces Mount, a place as may be seen by the photograph, which is very similar in climate and altitude to picturesque places in Switzerland where there are a great many establishments of this kind. The credit of this great work is due to President Obregón who submitted the plan to the Department.

c.—Typhus Fever.

This disease has prevailed endemically in the Anahuac Plateau since the most remote days, and presents epidemic outbreaks. The most terrible ones occurred in 1815, 1885, 1893, and 1915. It is claimed that the disease diminishes in the rainy months and increases in the dry seasons.

Dr. Ocaranza has found that in the City of México there exists an endemic zone of typhus as it is shown in the enclosed plan. There are also small shifting foci of infection in the city which are wiped out very rapidly. And there are cases too along certain streetcars and bus lines which threaten to become permanent.

The prevention of typhus fever was long limited to the betterment of housing conditions and streets, and to the

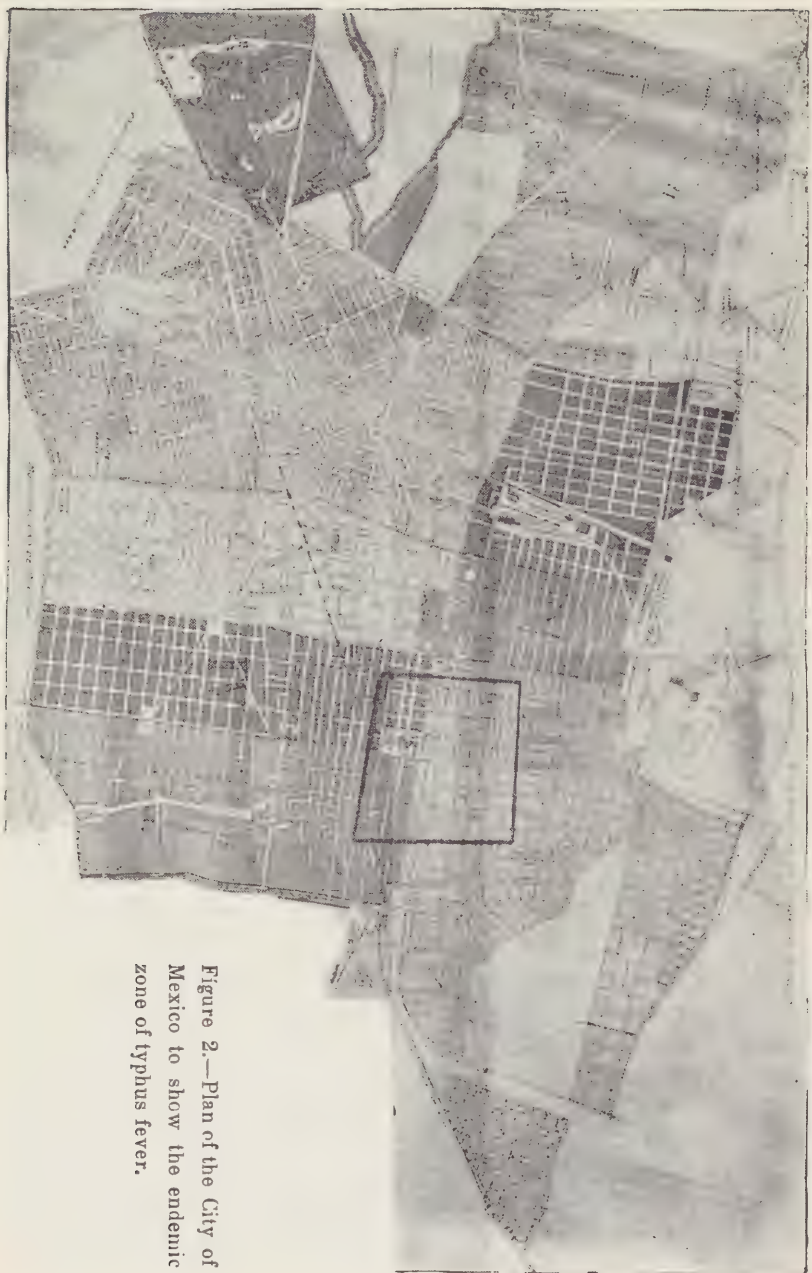


Figure 2.—Plan of the City of Mexico to show the endemic zone of typhus fever.

adoption of better water works and sewerage. Physicians are compelled to notify the Sanitary Authorities of every case of typhus. In the General Hospital infected persons are isolated.

From the time Dr. Pruneda and Dr. Ocaranza began to work in the **Departamento de Salubridad Pública**, the principal profilactic measure is the extermination of lice. The care of the sick includes: the cutting of the hair close to the head, clean clothing at least every other day and the rubbing of the skin with a mixture of equal parts of benne-oil and turpentine. Desinfecting of clothing is done by means of dry steam in the Vaudremer's stove which is very easy to handle. The houses are desinfected with Cyanide. The street cars and busses which run thru the infected zone are washed and desinfected daily and beggars frequenting the zone are forced to take frequent baths.

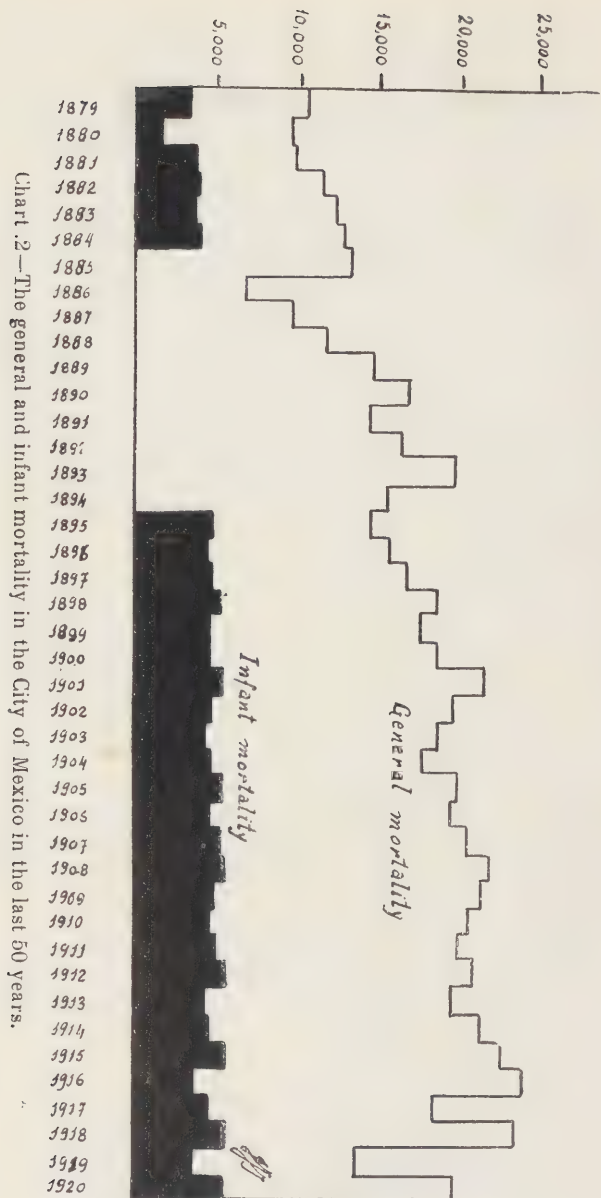
Chart No. 1 shows the mortality from typhus of late years in the City of Mexico.

d. Small Pox.

We have not reached the point where our statistics do not show morbidity and mortality from this terrible plague. The scourge was introduced in the country in 1520 by some infected negroes, who came with Narváez, one of the Spanish conquerors.

In Chart No. 1 the corresponding curve shows the part played by small pox in mortality during the last 52 years. It is also an important cause of loss of vision as will be shown in the Section on Preventable Blindness. Since the time the new Sanitary Authorities initiated their work, vaccination stations have been increased and we hope the disease shall decrease more and more and even be stamped out.

We should not forget that the measures against small-pox carried on in former years were effective also as will be shown in the section on blindness caused by this infection.



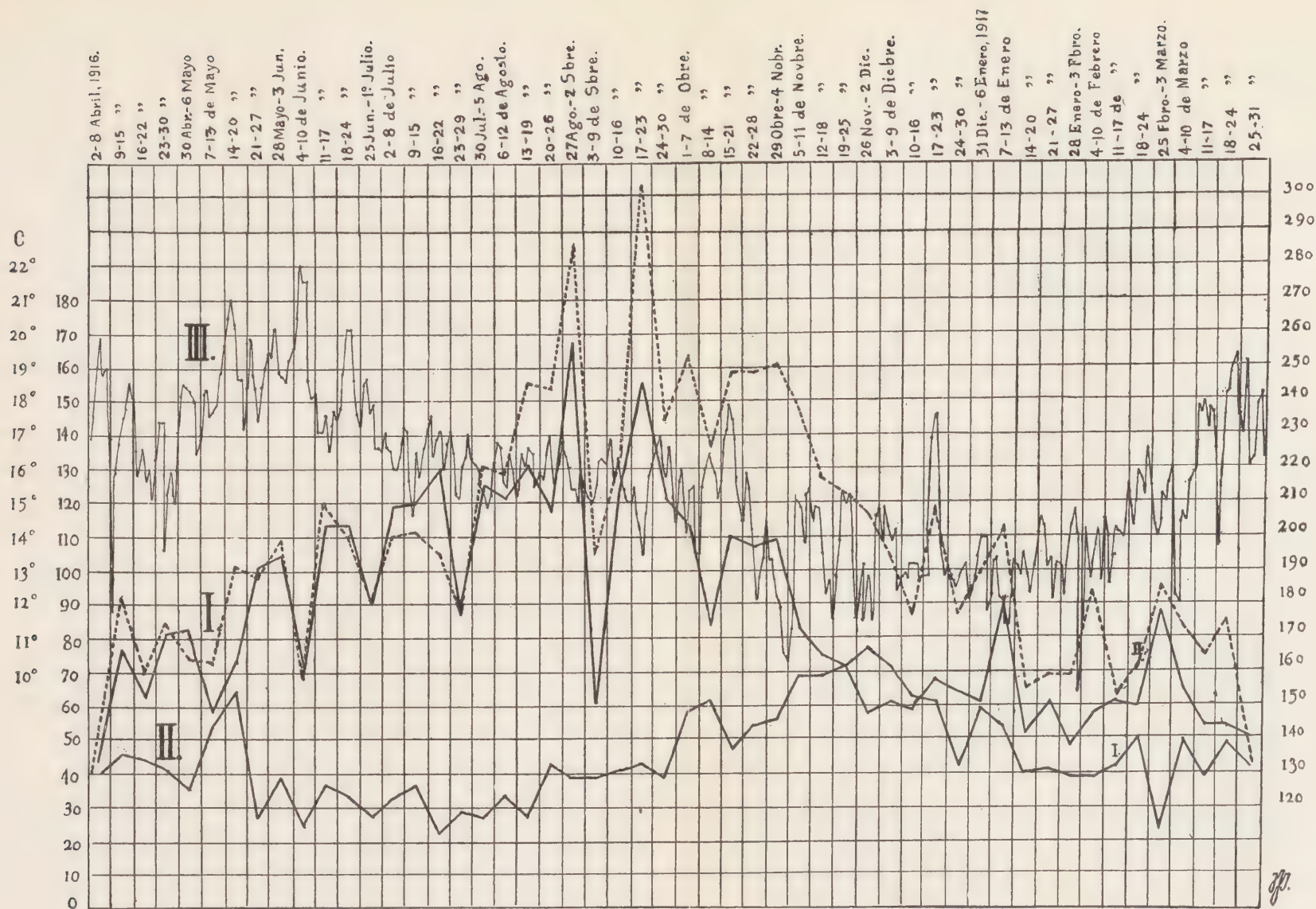


Chart 3 — Infant Mortality of Mexico City in the year 1916-1917.

INFANT MORTALITY.

Unfortunately for us the infant mortality is still very high, amounting during the last thirty years to 25 o|o of the general mortality, a figure which is very high as compared to other cities. The climax was reached in 1893 when it rose to 29 o|o and the minimum was reached in 1916 when it fell to 16.9 (See Chart 2.) It is impossible to state the ratio of infant deaths to live births because as yet birth registration is somewhat irregular.

The details of mortality in the first year of life are shown in Chart No. 3 which is taken from a study I made of this subject based on statistics for the year April 1916 to March 1917⁽¹⁾ The dotted line corresponds to the weekly mortality, line I to the mortality caused by diarrhoea and gastroenteritis, line II to that caused by diseases of the respiratory system and the light line III to the average temperature of air according to Central Metereological Station. The parallelism between the absolute infant mortality and the mortality caused by the affections of the digestive tract is very remarkable. The affections of the respiratory system stand as a second cause of death.

Charts No. 4, and No. 5 taken from the above mentioned pamphlet show death rate during the first year of life and from birth to fifteen years respectively.

Measles.

This disease is much less serious in México than in many other countries especially in England and Scotland, and its

(1) J. J. Izquierdo.—Un apunte sobre el estudio de la mortalidad y morbilidad infantiles de la ciudad de México.—Memorias de la Soc. «Ant. Alzate,» XXXVII, págs. 127-247, 1919.

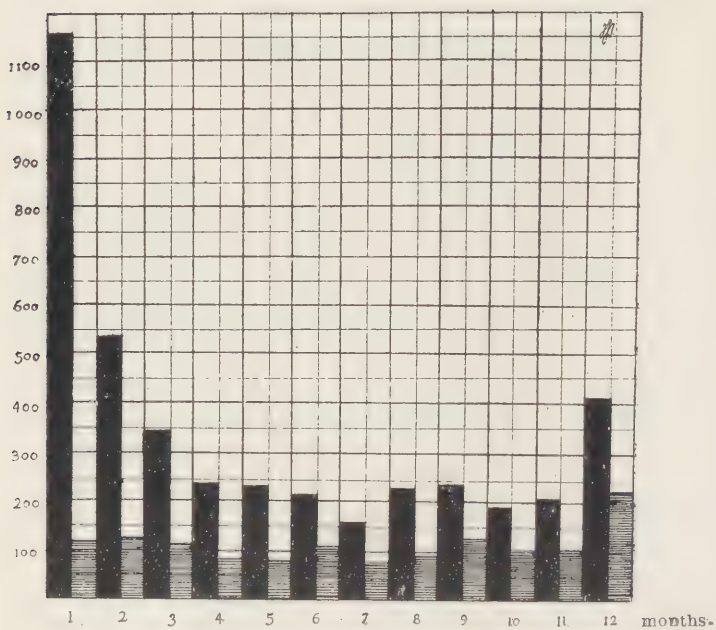
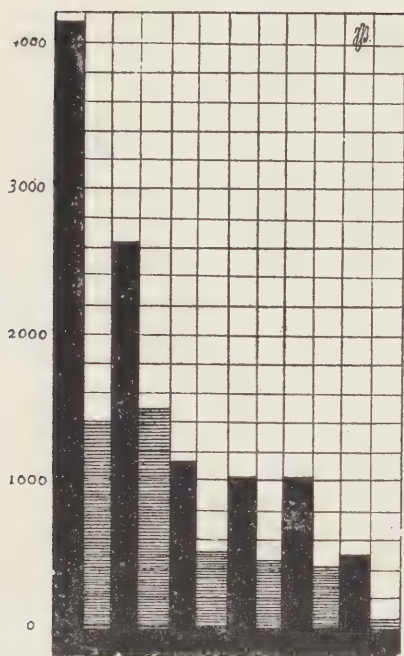


Chart 4.—Mortality of children under the first year of age.



0 to 1 1 to 2 2 to 3 3 to 5 5 to 10 10 to 15 years.

Chart 5.—Mortality of children between 0-15 years of age.

role in infant mortality is very slight.. I have found that as in all countries measles exists endemically in Mexico, presenting periodic outbreaks similar to those described by Müller and Gottstein in Germany and more recently by Levy in Richmond and Crumm in the United States.

CAMPAIGN AGAINST SOME INFECTIOUS DISEASES

a.—Vaccination.

The vaccine was brought to the country in 1804 when a comission came from Coruña bringing whith them 26 little children in order to keep the virus alive during the trip. The authorities always took great care in the use and preservation of vaccine. At first the City Council was in charge of it but in the year 1872, the **Consejo** took the work of vaccination in its own hands.

Dr. Velasco made compulsory the vaccination of children during the first six months of life. The following year the **Congreso Nacional de Higiene** held in México proposed the establishment of the **Conservatorio Vacunal** in the School of Agriculture, for the study, preservation, and cultivation of the animal vaccine. It proposed different methods of popularizing it to make the people understand its great value. It also introduced the revaccination and agreed that the vaccine of the revaccinated persons should not be used again.

About 1910 the personnel of the Consejo de Salubridad relied upon humanized vaccine rather than the animal. The opinion of some noted physicians and the discussions in Medical Associations resulted in the establishment of an Instituto Vacunal, where people could be vaccinated with animal lymph at will. Now vaccination is carried on exclusively with animal lymph prepared by the corresponding department in the Hygiene Institute. In the last years large quantities of vaccine have been distributed free to all.



A Vaccination Dispensary in Mexico City.

b.—Preventable Blindness.

According to certain statistics of the National School for the Blind, covering a period of forty nine years (1870-1918), 52.58 o/o of the inmates had lost their sight on account of ophthalmia neonatorum, and 16,21 o/o as a result of small-pox. The course of these two factors of blindness according to the statistics of the School may be more clearly seen in Chart 6. which I take from one of my works (1). It shows that during the first years that the School was established small-pox was the main factor in causing blindness, but in the following years it has diminished as a factor owing perhaps to the campaign against it. Only in the most recent years have the cases of blindness on account of it increased. Ophthalmia neonatorum, which in the earlier years caused 30 o/o of blindness has increased until in 1910 to 1914 it reached the astounding figure of 75 o/o of cases. This is due to the fact that for a long time the prevention of this terrible disease was neglected, but since Dr. Malda and Dr. Pruneda have been President and Secretary of the Department, they have shown great activity in combating it making it obligatory for physicians and mid-wives to report all cases. Whereupon the small patients are visited in their homes by special personnel and nurses appointed for the purpose. The inspecting physicians visit the patients as often as necessary and if the family is indigent the Department takes care of the case free of charge.

The beneficial results of this campaign are clearly apparent: from December 1920 to August 1921, 45 cases were reported, 42 of which were completely cured, the remaining have curable lesions in both eyes.

To intensify this campaign mid-wives and the public in general have received instructions by means of conferences, pamphlets and posters.

1) J. J. Izquierdo.—La Ceguera en la República Mexicana. Su repartición, su frecuencia sus causas. Memorias de la Soc. «Antonio Alzate,» Vol. XXXVIII pág. 121, 1918.

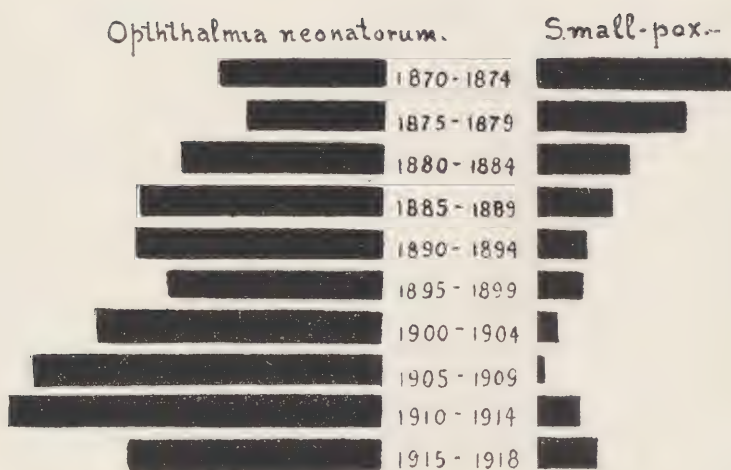


Chart. 6.—Ophthalmia neonatorum and Small-pox as causes of blindness in the National School for the Blind.

c.—Yellow Fever.

Yellow fever has prevailed in the towns and cities of our seacoast for more than four centuries. From 400 years ago at the time the Spaniards settled Veracruz, the city was visited by the epidemic every Summer. It made its appearance in March reaching its maximum in August and then decreased until December when only a few cases were observed.

Since 1894 the Federal Government has put in force the services of a Maritime Quarantine. But it was not until 1902 that the campaign against yellow fever was started. It included the isolation of the sick people and the suspected ones, the destruction of infected mosquitoes found in the houses of the patients; the extermination of larvae of *Stegomyia fasciata* and obturation of the clean water deposits where they lay their eggs; destruction of the places where mosquitoes hatched, and dissection of lands, all this according to the agreement of the Washington Conference in 1902 and the Pan-American Conference in 1901-1902. These measures were established in the seaports of Veracruz and Progreso and in Mérida.

The beneficial results of this campaign were felt the following year. From October 1901 to September 1902 there were in Veracruz only 721 cases of yellow fever and 274 deaths from it. In 1904 there were in the whole Republic 201 cases and 98 deaths. The decrease was even greater in 1906 when there were only 171 cases in the whole country. That is why the Sanitary Convention held at Washington in October 1905 sent its congratulations to México, Panama and Cuba for their efforts to exterminate yellow fever, pest and cholera.

At last in 1907, 300 years after its foundations, Veracruz reached the point where it did not register any cases of yellow fever during the Summer, and in the whole country there were only four cases, 2 in Mérida and 2 in Veracruz. At the meeting of the American Public Health Association at Atlan-

ta City, in that year, Dr. Orvañanos expressed the hope that the disease could be considered as exterminated.

We should not forget the important and perseverant work of Dr. Licéaga in the campaign, for more than 16 years he persistently gave information about the yellow fever to the different meetings of the American Public Health Association. We most remember also the interest that the government took in the enterprise.

Last June the disease reappeared but thanks to the active campaign carried on against it, it has greatly diminished. The campaign includes the spreading by means of bulletins, posters and movies of hygienic measures, the increasing of the campaign against the larvae of the mosquito, by employing fish to devour them, the vaccination of the non-immune specially of the troops sent to the infected zones with the antileptospirous vaccine of Noguchi and the establishment of a special commission created by special appointment of the President of the Republic, that includes american and mexican physicians who work under the direction of the Department of Public Health. In this Commission Drs. Lyster, Caldwell, Connor and Vaughn of the Rockefeller Foundation, gave very valuable services. The International Health Board of the same Foundation sent a considerable quantity of serum for the yellow fever treatment and of preventive vaccine against the disease.

The efficiency of the work carried on in Veracruz was demonstrated in the following case: four infected people arrived to the city and yet gave rise to no more cases of yellow fever, a fact that may be due to the practical absence of mosquito.

We are publishing a table of the cases and deaths observed in 1920 and 1921, which shows the decrease of the disease and makes us hope that the time is not far distant when México will be free from it.

Under the initiative of this Commission the **Departamento de Salubridad Pública** recently organized the First

STATES AND TERRITORIES	FIRST CASE REGISTERED	1920		1921	
		Cases	Deaths	Cases	Deaths
Veracruz.....	June 8th	485	235	83	13
Yucatán.....	July 25th.....	13	8		...
Tamaulipas, Tampico	September 16th.....	5	4	1	1
Campeche.....	October 17th	1	1		...
Quintana Roo.....	December 28th.....	1	1		
<i>Total.....</i>		505	249	84	14

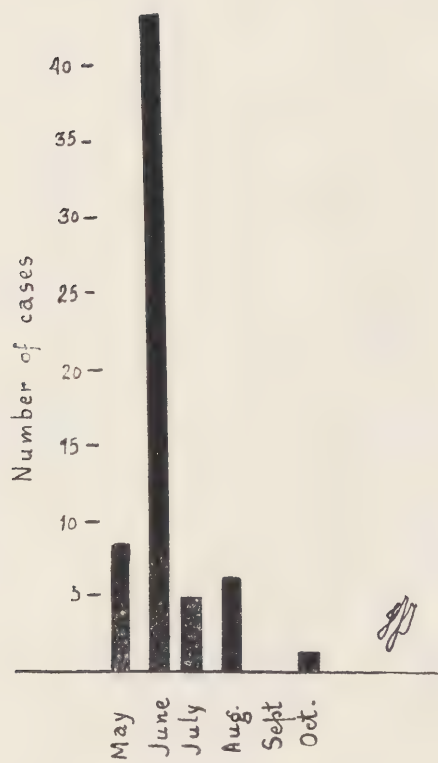


Chart. 7.—Shows the pest in Veracruz, in 1920

Yellow Fever Convention, to hear reports of all that has been accomplished against this disease since last January, and to discuss the plans of the Campaign for the year 1922, which is to be put into effect after it has been approved by the Department. This Convention met from the fifteenth to the twentieth of last October.

d.—Bubonic plague..

In December 1902, the plague made its appearance on our Pacific coast in the sea-port of Mazatlán, but thanks to the active means that were employed it was exterminated in six months.

On the 22nd, of last May the Department learned of some suspected cases of pest in Veracruz and dispatched Dr. González Fabela as Head of the campaign. Dr. Fabela hastened to the infected city equipped with the finest means for exterminating the epidemic.

The methods put in action by the Department included the isolation of actual and suspected cases; the vaccination of the whole population, preventing people living in the infected houses, the improvement or destruction of houses in such condition as to shelter the rats and mice which disseminate the plague, the prevention of accumulation of dirt and specially one energetic campaign against rats, according to the last experiences in another places of the world. The plague probably had reached Veracruz thru infected rats from New Orleans. The first case appeared the 22nd. May and the last one the 20 th. of October 1920. During this period the epidemic followed the course shown in Chart 7 with a total of 61 cases. In Tampico the plague appeared later and its course is indicated in Chart No. 8, from June 6 to October 10. The Institute of Hygiene prepared 69,640 c. c. of pest-vaccine and the campaign against the disease was similar to that of Veracruz.

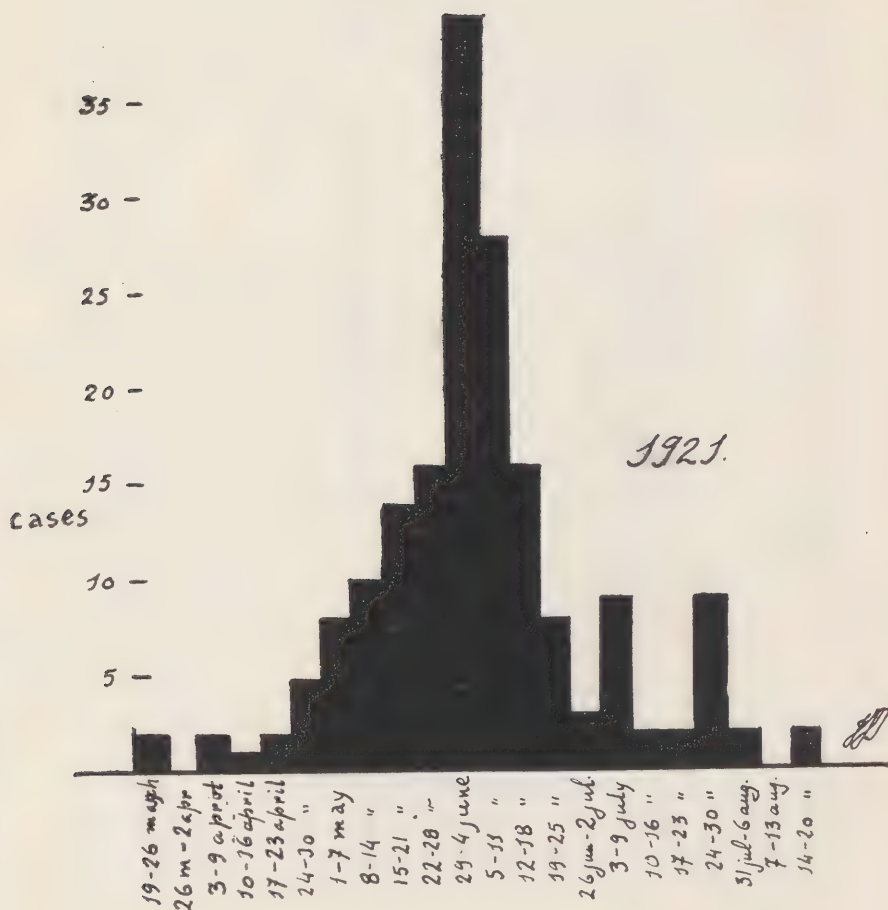
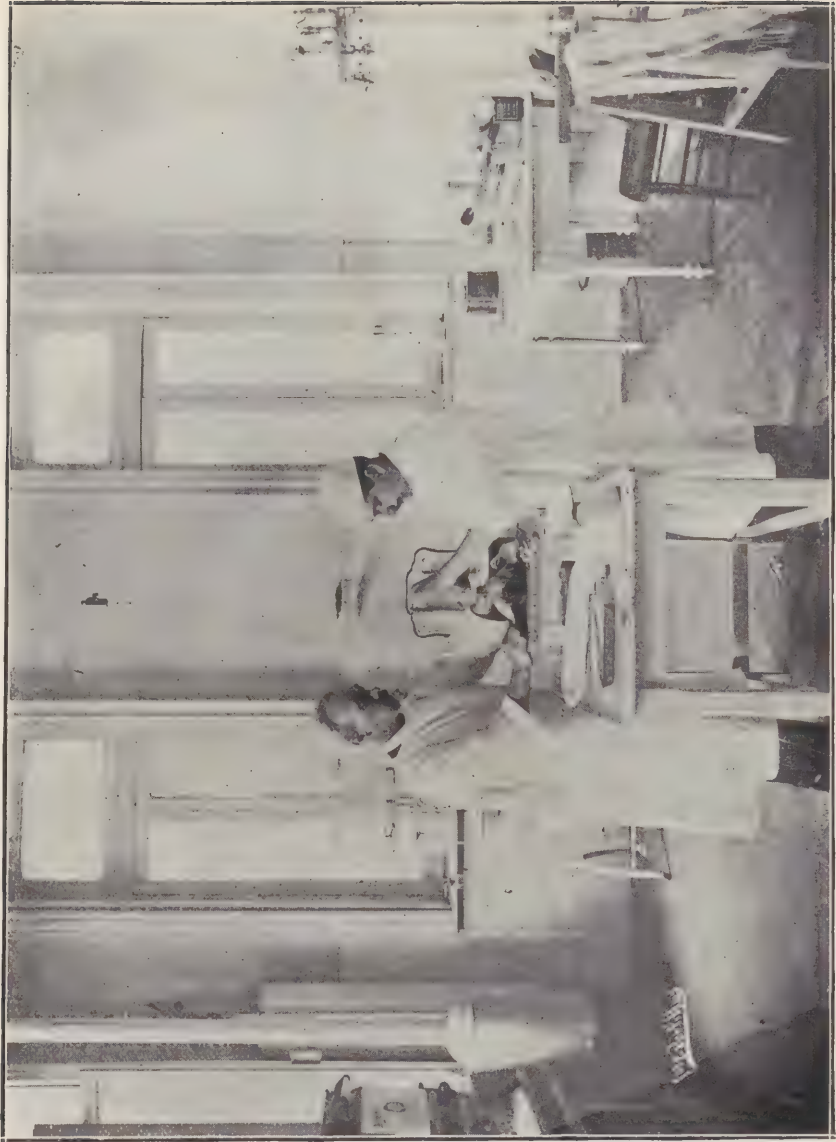


Chart. 8.—The last epidemic of plague in Tampico.



A room in the Antirabic Institute.

e.—Campaign against uncinariasis.

At the suggestions of Dr. B. Vasconcelos, it was decided to initiate a campaign against the disease which according to the Medical National Institute is quite prevalent throughout the Republic, specially in the states of Veracruz and Tabasco. Dr. Landa and Dr. Argüello have modelled the plan for this campaign on that used by the Rockefeller Institute in Central and South America.

f.—Rabies.

In 1887, three years after Pasteur had for the first time inoculated man with its virus for rabies, was brought to México. Since then rabbits have been continually inoculated and several thousand people have been treated. The period of incubation for the first rabbits was from seven to eight days but it has gradually lessened to four days.

THE DRAINAGE OF THE VALLEY OF MEXICO.

After the Conquest, the Spaniards erected Mexico City on the site of the former Indian City of Tenoxtitlán which was located in the lowest part of the valley and surrounded on all sides by mountains which obstructed the exit of waters from the rivers, rains, and the springs which gush from the lakes inside the valley. On account of these obstructions when the heavy rains came the lakes which are on a higher level overflowed the city. Before the Conquest and thru the Colonial Period this danger was the constant preoccupation of the authorities, which tried different ways of doing away with it. Their efforts however were only partial and inefficient, and it was not until 1630 that the great work of draining the Valley was first planned. Later in 1856 and 1879 the plan was

improved. The work was not began till 1886 and it was finished in 1900 with an expense of \$16,000,000 pesos. (*)

The object of this work was to prevent the inundation of the City, to carry all the waste waters out of the valley, and to control the waters in it. To give an idea of the greatness of this work we shall describe it briefly. It is made up of three parts: First comes a canal with a lenght of 47.5 kilometers and a depth of 5.75 meters at its starting point and 21.28 meters in the last part of its course.

This canal is really a prolongation of the city's sewer. Next comes a dam and a tunnel 10 kilometers long which carries the water from the canal to a tributary of the Pánuco River which has its outlet in the Gulf of Mexico. Last comes an enormous trench 2,500 meters long cut in the rock.

CHILD WELFARE.

It is hardly strange perhaps that we in Mexico have done so little for the welfare of our children and the reduction of our high infant mortality when nations as cultured as France received their first lessons in these subjects from the United States during the world war. On september 11 th of this year however, at the initiative of Dr. Malda and Dr. Pruneda, the Department opened its first Baby-Week. The patio and ground floor rooms of the Administrative Building were fitted up with ample booths for exhibits especially prepared for fathers and mothers for Exhibits on Eugenics, Prenatal Care, Infant Mortality, Diseases of Children, Care of the Baby, including Clothing, Feeding, Bathing and Sleeping Arrangements, and Care of the Eyes and Teeth. Other exhibits of great importance were those on Milk, on Flies, on the effect of poverty and defective housing on the children subjected to them, on the special disadvantages from which country children suffer and the exhibits on the welfare acti-

(*) About 8,000,000 dolls.

vities in operation in México and in foreign countries with special reference to clinics and public health nurses.

Many practical demonstration supplemented the posters which lined the walls and every day physicians from the Department and Officials from the Municipality offered free vaccination and free birth registration to all who have not heretofore availed themselves of those advantages.

Every day of the week had its special program. On Sunday banners were distributed to all the homes of the city in which a child had recently been born. On Monday all the primary school held festivals during which little talks on hygiene were interposed between the lighter features and a small illustrated pamphlet similar to the 'Metropolitan Mother Goose' was distributed to the pupils. Another very striking feature of the Week was a Baby Righ's Parade. More than a hundred autos were placed at the disposal of the insurgent infants who traversed the principal avenues of the city proclaiming by means of banners and posters their rights to intelligent parents, visiting nurses, good housing, proper feeding and all other things which modern babyhood has been taught to demand.

The last day of the Week was dedicated to the fathers of the city and in the principal associations of the city talks were delivered on the duties to the childhood of México. Especially prepared "Message to Fathers" was distributed at these meetings to supplement the "Message to Mothers" and the various pamphlets on Child Care that were distributed at the Exhibit.

Among the most charming numbers of the program were the Health Festivals given by the children of the group of kindergartens, and three fairy plays also teaching the gospel of health given by the pupils of three leading schools.

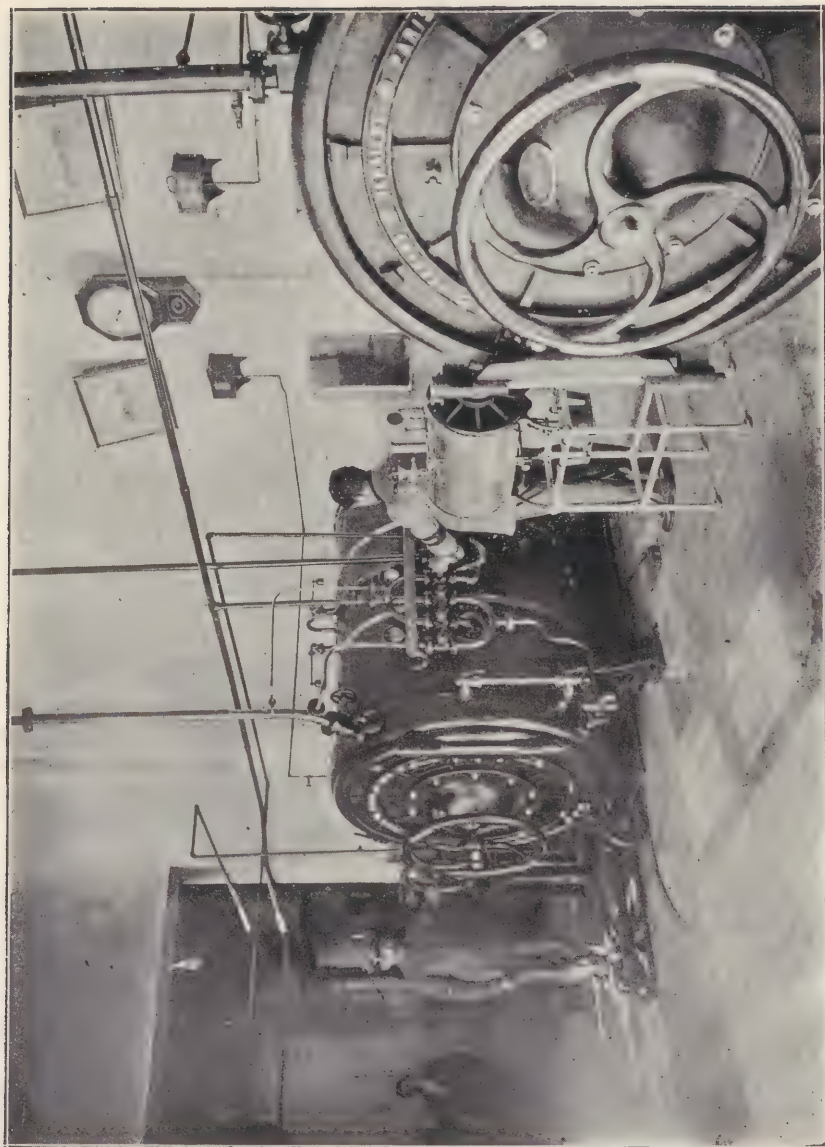
The Department hopes to take advantage of the deep interest thus awakened to begin a permanent program for the welfare of the children of the country and next year will stablish an Division of Child Wefare.

PRESENT ORGANISATION AND WORK.

At the present time hygiene and public health are in the hands of the Departamento de Salubridad Pública, which was created by the Constitution of 1917, and of the different Departments or Health Boards in operation throughout the Republic.

It became an entirely independent administrative entity whose affairs are discussed directly, through the Chief of the Department, with the President of the Republic. The old Consejo which had done such worthy service continues to exist as an Advisory Body within the Department and in some cases as Executive Board. Its authority in case of epidemics and in combating such social evils as alcoholism and the use of other drugs which contribute to the degeneracy of the race, extends not only to the Federal Districts and Territories but to all the States as well.

The administrative affairs of the Department are in the hands of a Secretariat. The President of the Consejo is at the same time the Chief of the Department. The technical work is carried on by him as director and by some commissions formed by members of the Consejo. These commissions include: Inspection of food and drinks, housing, industries, churches, theaters and other meeting places, markets, public buildings, hospitals and asylums and drug stores; burying and exhumations; practice of Medicine; veterinary hygiene and medicine; military hygiene; public health; bacteriology; epidemiology; epizooties; vaccination; demography; publications; Federal affairs such as immigration and emigration, quarantines, and so forth. Besides the work carried on by these commissions, the Department has the following sections: School Hygiene which supervises the health conditions of the children of the Municipal Schools; Contagious diseases, with the object of preventing their spread; Venereal Diseases which deals with prostitution and which in special dispensaries combats the venereal infections; the **Morelos Hospital**



Hall for disinfection.

which cooperates with the preceeding section by treating the women confined in it; Desinfection, which lately has also taken charge of the campaign against the rats; Sanitary Engineering, which takes care of the hygienic conditions of dwellings, meeting places and factories. The Department is spreading its labors more and more throughout the country. Delegates who make every possible effort to carry on the highly important work of higiene are sent to different places of the Republic.

For the fulfilment of all its labors, the Department had a budget of 2,570,000 pesos for this year. The actual President is Dr. Gabriel Malda and the General Secretary, Dr. Alfonso Pruneda. Both have the same position within the Consejo Superior de Salubridad that is formed, besides, by the following men: Drs. Angel Briosó Vasconcelos, Francisco Castillo Nájera, Fernando Ocaranza, Nicolás Ramírez de Arellano, Alberto Román y Rafael Silva; the Engineer, Ernesto P. Malda; the Attorney, Antonio Ramos Pedrueza; the chemists, Ricardo Caturegli and Miguel Cordero; The Veterinary physician, Eliseo Zendejas, and the General Inspector of the Department, Dr. Jesús E. Monjarás..

Besides the modern building of the Departament it has amongst others, laboratories where pulmonary tuberculosis, diphteria, syphilis and other contagious diseases are diagnosed free of charge. It also has a dispensary for the free tratment of venereal diseases, with the special purpose of doing away with their contagious accidents.

Amongst the activities carried on from May 1920 to the present time, out of those already mentioned we can cite the following: it has been made compulsory to report cases of whooping cough, leprosy, grippe and ophtalmia neonatorum; revaccination is also made compulsory when the health authorities think it necessary; certain restrictions have been made to combat medical charlatanism and certain orders given to make easy the registration of foreign physicians, dentists and pharmacists who hold titles from accredited universities. A general call has been made with the purpose of forming a National Pharmacopoeia.

Food and drug inspection is becoming more and more effective and adulteration more severely punished. The sale in public markets of food unprotected from dust is forbidden.

Health propaganda and education has been increased. Conferences have been given to mid-wives, parents and teachers, and a great many pamphlets on the prevention of ophthalmia nonatorum, whooping cough, grippe, small pox, yellow fever, malaria and other diseases have been distributed.

Museums have been established where wax figures are used as means of education against venereal diseases. Moving-pictures and slides are also used for the same purpose.

The goal of the Department is to continually improve the services of the different sections, especially that of communicable diseases and of the visiting physicians who are required to hold frequent conferences on subjects of interest to them so that a uniform method of procedure for the work may be attained. Special courses in bacteriology and other subjects are provided. Several physicians have been sent by the Government to foreign countries to make special studies on tropical diseases, parasitology, pediatrics, pre-natal care and hygiene in general.

The present Directors of the Department are perfectly aware that only a long education will be effective in reducing our high mortality rate and increase the average duration of life which at present is very short. And it is undoubtedly true that only education will solve our hygienic problems and will give better life-habits of hygiene to our children.

But since all this cannot be learned through verbal lectures only but requires practice and example, the Department decided on the creation of the **Institute of Hygiene** where physicians, engineers, teachers, and others are given practical instruction in all subjects relating to Scientific Hygiene. The Institute trains sanitary physicians and engineers, public health officers and nurses for dispensaries, sanitariums and schools.

At the present time it is in charge of the production of animal vaccine, which as we have stated is the only kind now



A room in the Chemical Analysis Laboratory.

in use. It also has sections of Parasitology, Bacteriology and Biological research.

The Institute is moreover an Advisory Body for the Department and the public in general in questions pertaining to Sanitary Engineering, Parasitology and so forth. The solutions of these questions are given to the public accompanied by demonstrations in the respective laboratories and museums.

Relations between the Rockefeller Foundation and the Department become more and more cordial every day especially since the Rockefeller Foundation has shown its friendship by lending its services for the campaign against yellow fever. It has also very good relations with the United States Public Health Service which very kindly allowed Dr. Mitchel to come to Tampico to cooperate in the campaign against the bubonic plague. The Department has been represented in the following International Conventions: American Public Health Association, at San Francisco; Panamerican Conference on Venereal Diseases, at Washington; International Health Convention of the American Republics, at Montevideo; Red Cross Convention, at Genève International Convention for Child Protection held in Bruselas and the American Veterinary Association, Denver.

PUBLICATIONS.

The first bulletin of the Consejo was published in 1870 to give the public its opinions concerning the problems which came under its jurisdiction and to stimulate the medical men of the country to join in the study of health problems. Four volumes were published in this first series after which it was discontinued until 1892 when the second series was started with three volumes. The third series consisting of twenty volumes was published from 1895 to 1914 when proceedings were again suspended on account of political disturbances. Finally since 1916 the fourth series is being published. The bulletin contains the monthly mortality sta-

tistics, statistics of vaccination, food and drug inspection, yellow fever, typhus, etc.

Besides its periodical publications the Department has recently published pamphlets on public and personal hygiene which have been distributed among the laity, physicians and mid-wives.

By all that has been said, it may be seen that in México, not withstanding the difficulties that have arisen since her Independence, Hygiene and Sanitation have been the constant preoccupation of the different Governments, and although México cannot say that she has attained the progress that has been reached in other countries, it is only just to say that every effort has been made to reach that standard and our country is proud of having had such men as Drs. Alvarado, del Río, Velasco and Licéaga who worked persistently to better the sanitary conditions of the country.

The increasement of the activities of the Department began when Sr. Adolfo de la Huerta was temporary President of the Republic, and continued to progress greatly under the Administration of General Alvaro Obregón. Both have shown a great deal of interest in the Department and have helped it in every possible way.



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